

MAGNOLIA TRIPETALA IN SPRINGFIELD, MASSACHUSETTS.

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SOME time ago my attention was called to one of our cultivated southern magnolias (*Magnolia tripetala* L.) growing apparently spontaneously in Springfield, Mass. Being interested in the occurrence of this species in a locality so remote from its native habitat and wishing to learn more of its occurrence there, one day last summer I made a trip to the location. Dr. W. H. Chapin, of Springfield, who discovered these trees, was the first to call my attention to them. He had observed them growing in two distinct localities in Springfield and has been familiar with these groups for some years.

One small tree about nine years old is now growing in Edgewood swamp, which is only a few rods from a much travelled highway and near the Boston & Albany railroad. The other station, which I did not visit, is on the edge of a pond about a mile from the swamp and about two miles east of the center of the city, towards Wilbraham. The group located on the pond shore has, I understand, been practically exterminated by the woodsman's axe, although a number of fairly good sized trees formerly grew there. The Edgewood swamp tree is seven or eight feet high and is growing in rather dense shade, surrounded by tall trees and such undergrowth as poison sumach, *Ilex*, *Osmunda cinnamomea* and other ferns. The tree was making good growth and appeared to be perfectly at home. From its habit of growth it would seem easy for this tree to become established in this location.

There are a number of these trees in cultivation in Springfield, and it is presumed that the ripened seeds were gathered by birds and dropped at these two stations. As an ornamental tree *Magnolia tripetala* thrives better in our range than some of our native species, notwithstanding its typical southern habitat.

The factors underlying plant distribution and adaptation are quite complex and difficult of solution; and in these days of soil surveys it would be of some importance to agriculture if we could know more about the subject. It is by no means easy to explain why a tree like *Magnolia tripetala*, which grows so well under our climatic conditions, is not indigenous to this region, or even why *M. glauca*, which is regarded as indigenous here, should be restricted to such a narrow range.

AMHERST.